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Claims

WHAT IS CLAIMED IS:

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1. A flammable article comprising:

(i) a polyamide gellant, selected from the group consisting of fatty polyamides and ester terminated polyamides;

(ii) a fatty acid ester solvent having a carbon chain length of at least about 9 carbons; and

(iii) a fatty acid solubilizer, said solubilizer comprising at least 1% by weight of the flammable article.

2. The flammable article of claim 1 further comprising a fatty acid solubilizer having a carbon chain of between about 1 to about 22 carbons.

3. The flammable article of claim 1 further comprising a fatty alcohol solubilizer having a branched carbon chain of between about 10 to about 20 carbons.

4. The flammable article of claim 1 wherein the solubilizer comprises isostearic acid, said flammable article further comprising isostearic alcohol.

5. The flammable article of claim 1 wherein the solubilizer comprises isostearic acid.

6. The flammable article of claim 1 wherein said polyamide gellant comprises a mixture of fatty polyamide and ester terminated polyamide.

7. The flammable article of claim 6 wherein the fatty polyamide is present in a weight ratio of parts fatty

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polyamide to parts polyamide gellant of between about 1:11 to about 1:3.

8. The flammable article of claim 6 wherein the fatty polyamide is present in a weight ratio of parts fatty polyamide to parts polyamide gellant of between about 1:10 to about 1:5.

9. The flammable article of claim 6 wherein the ester terminated polyamide is present in a weight ratio of parts ester terminated polyamide to parts polyamide gellant of between about 2:3 to about 10:11.

10. The flammable article of claim 6 wherein the ester terminated polyamide is present in a weight ratio of parts ester terminated polyamide to parts polyamide gellant of between about 7:10 to about 5:6.

11. The flammable article of claim 1 wherein the fatty acid ester has a branched carbon chain of between about 16 to about 22 carbons.

12. The flammable article of claim 1 wherein the fatty acid ester is selected from the group consisting of 2-ethylhexylstearate, isopropyl myristate, 2-ethylhexylpalmitate, 2-ethylhexylisostearate, and isopropyl stearate.

13. The flammable article of claim 1 wherein the fatty acid ester comprises a sorbitol fatty acid ester, a monoalcohol fatty acid ester, a polyol fatty acid ester, a fatty acid ester alkoxylate, or hydrocarbyl fatty acid ester.

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14. The flammable article of claim 13 wherein the monoalcohol fatty acid ester is a propylene glycol fatty acid ester.

15. The flammable article of claim 13 wherein the polyol fatty acid ester is a glycerol fatty acid ester.

16. The flammable article of claim 13 wherein the fatty acid ester alkoxylate comprises fatty acid ester ethoxylate, fatty acid ester propoxylate, or fatty acid ester butoxylate.

17. The flammable article of claim 1 further comprising hydrocarbon oil.

18. The flammable article of claim 17 wherein the hydrocarbon oil comprises light mineral oil.

19. The flammable article of claim 17 wherein the hydrocarbon oil comprises vegetable oil.

20. The flammable article of claim 17 wherein the hydrocarbon oil comprises castor oil.

21. The flammable article of claim 1 wherein the flammable article is a candle.

22. The flammable article of claim 1 wherein said polyamide gellant comprises between about 10 to about 90% by weight of the article, said fatty acid ester comprises between about 5 to about 70 % by weight of the article, and said solubilizer comprises between about 1 to about 75% by weight of the article.

23. The flammable article of claim 1 wherein said polyamide gellant comprises between about 10 to about 70

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weight % of the article, said fatty acid ester comprises between about 10 to about 50 weight % of the article, and
5 said solubilizer comprises between about 2 to about 30 weight % of the article.

24. The flammable article of claim 1 wherein said polyamide gellant comprises between about 40 to about 60 weight % of the article, said fatty acid ester comprises between about 10 to about 20 weight % of the article, and
5 said solubilizer comprises between about 3 to about 10 weight % of the article.

25. The flammable article of claim 1 further comprising one or more plasticizers.

26. The flammable article of claim 24 wherein the plasticizers comprise between about 0-15% by weight of the article.

27. The flammable article of claim 24 wherein the plasticizers are selected from the group consisting of dioctylphthalate, dibutylphthalate, bis(2-ethylhexylterephthalate), bis(2-ethylhexyl) adipate, and
5 tris(2-ethylhexyl) trimellitate.

28. The flammable article of claim 1 further comprising one or more fragrances.

29. The flammable article of claim 1 further comprising one or more coloring agents.

30. The flammable article of claim 28 further comprising one or more coloring agents.

31. A translucent solid candle, comprising:
about 10-30% by weight fatty polyamide;

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about 10-70% by weight of ester terminated polyamide;

5 about 10-30% by weight of mineral oil;

 about 15-50% by weight of fatty acid ester, said fatty ester comprising a branched carbon chain of between about 10 to about 24 carbons;

 about 5-15% by weight of isostearic acid;

10 about 0-10% by weight of isostearyl alcohol;

 about 10-75% by weight of plasticizer;

 about 0-5% by weight of fragrance;

 about 0-5% by weight of coloring agents; and a wick.

32. The candle of claim 31 wherein the fatty acid ester is selected from the group consisting of 2-ethylhexylstearate and ethylhexylpalmitate.

33. The candle of claim 31 wherein the fatty acid ester comprises a mixture of 2-ethylhexylstearate and ethylhexylpalmitate.

34. The candle of claim 31 wherein the ester terminated polyamide comprises UniClear 80°.

35. The candle of claim 31 wherein the plasticizer is selected from the group consisting of dioctylphthalate and dibutylphthalate.

36. The candle of claim 31 wherein the plasticizer comprises a mixture of dioctylphthalate and dibutylphthalate.

37. A translucent solid candle, comprising:
 about 2-10% by weight fatty polyamide;
 about 20-50% by weight of ester terminated polyamide;

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- 5 about 15-30% by weight of mineral oil;
 about 10-20% by weight of fatty acid ester, said
fatty ester comprising a branched carbon chain of
between about 10 to about 24 carbons;
 about 2-10% by weight of isostearic acid;
10 about 0-10% by weight of isostearyl alcohol;
 about 2-15% by weight of plasticizer;
 about 1-4% by weight of fragrance;
 about 1-4% by weight of coloring agent; and
a wick.

38. The candle of claim 37 wherein the fatty acid ester is selected from the group consisting of 2-ethylhexylstearate and ethylhexylpalmitate.

39. The candle of claim 37 wherein the fatty acid ester comprises a mixture of 2-ethylhexylstearate and ethylhexylpalmitate.

40. The candle of claim 37 wherein the plasticizer is selected from the group consisting of dioctylphthalate and dibutylphthalate.

41. The candle of claim 37 wherein the plasticizer comprises a mixture of dioctylphthalate and dibutylphthalate.

42. A translucent solid candle, comprising:
/ about 40-60 % by weight UniClear 80°;
 about 5-20 % by weight of fatty acid ester, said
fatty ester comprising a branched carbon chain of
5 between about 16 to about 22 carbons;
 about 30-40% by weight of mineral oil;
 about 2-10% by weight of isostearic acid;
 about 5-15% by weight 2-ethylhexylstearate; and
a wick.

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